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E7.4-10430
CR-137377

Progress Report on ERTS Project 281

a. Title of Investigation

Sediment Pattern Correlation with Inflow and Tidal Action, Proposal
No. MMC 281.

b. Principal Investigator

Warren E. Grabau, CSFC ID DE328

c. Problems

None

d. Work Accomplished 1 January - 28 February 1974

Preparation of a draft of the final report of the Chesapeake
Bay study is under way. This report will include the presentation
and analysis of data from the two 10 October 1972 scenes of the
Chesapeake Bay area.

In response to amendment No. 5 to Contract S-70259-AG, computer
compatible tapes for scenes No. 1285-16024, 1266-20581, and 1295-
15142, which cover Lake Pontchartrain, Cook Inlet, and the Choptank
River, respectively, are being processed for the purpose of produc-
ing photomaps that show the distribution of suspended materials.
The results will be included as a part of the report now being
prepared.

The effects of the horizontal lineations that are apparent in
much of the ERTS-1 data have been minimized in sediment concentra-
tion photomaps by a recently developed computer program. This
program is applied to the ERTS-1 data after the pixels are classi-
fied according to the spectrum they match, thereby minimizing any
adverse effects that might otherwise result from digitally filter-
ing the data.

e. Work Contemplated 1 March - 30 April 1974

Processing of ERTS-1 data for the scenes of the Choptank River,
Cook Inlet, and Lake Pontchartrain will be completed.

Preparation of the draft of the final report of the work in the
Chesapeake Bay area, Lake Pontchartrain, and Cook Inlet will be
continued.

(E74-10430) SEDIMENT PATTERN CORRELATION
WITH INFLOW AND TIDAL ACTION Progress
Report, 1 Jan. - 28 Feb. 1974 (Army
Engineer Waterways Experiment Station)
2 p HC \$4.00

N74-20957

Unclas
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CSCL 08C G3/13

Incl. 1

f. Significant Results

None this reporting period.

g. Published Articles, Papers, Reports, Talks

The following papers concerned with ERTS-1 work under way at the USAE Waterways Experiment Station have been prepared:

(1) "A Technique for interpretation of Multispectral Remote Sensor Data," by A. N. Williamson; presented at the ASP/ACSM Symposium on Remote Sensing in Oceanography, Orlando, Florida, in October 1973, and subsequently presented upon request at the ASCE Annual and Environmental Engineering meeting held in New York, N. Y., 29 October - 2 November 1973.

(2) "Sediment Concentration Mapping in Tidal Estuaries," by Messrs. W. E. Grabau and A. N. Williamson; presented by Mr. Williamson at the Third Symposium on ERTS-1 Studies held in Washington, D. C., 10-14 December 1973.

(3) "Mapping Suspended Particle and Solute Concentrations from Satellite Data," presented by A. N. Williamson at the ASCE National Water Resources meeting held in Los Angeles, Calif., 21-25 January 1974.